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ABSTRACT

This report presents findings from the first 2 years of a 4-year longitudinal study of outcomes for approximately 600 students with disabilities after leaving public school. The study is one component of the Special Education Effectiveness Studies. The study evaluated student outcomes in four life skill areas: (1) employment; (2) independent living; (3) recreational, social and leisure skill acquisition; and (4) postsecondary education. In the domain of employment, most participants were employed less than 40 hours per week, most had jobs that did not provide fringe benefits, and almost 40 percent were unemployed. Those with severe or profound mental retardation were least likely to be employed; those with learning or emotional disabilities most likely. In the domain of independent living, 72 percent continued to live at home. In the domain of recreational, social, and leisure skill acquisition, students did engage in independent and/or family supported recreational activities, but participation in clubs and organizations declined and frequency of socializing with nondisabled friends also declined following graduation. Finally, three-fourths of the students were not involved in any postsecondary education. Preliminary recommendations focus on the need for education to be student driven and for increased cooperative and collaborative efforts across agencies. Ten tables detail the study's findings. (DB)

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A Longitudinal Study of the Experiences of Students with Disabilities: Preliminary Findings

for Students Receiving Special Education Services

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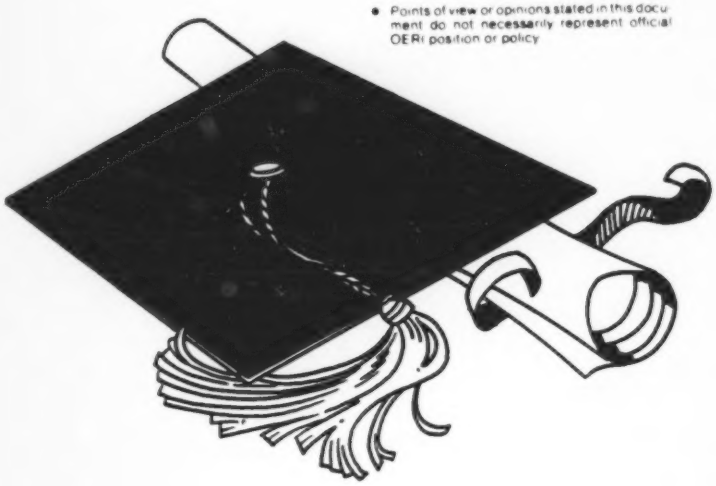

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Part of the Special Education Effectiveness Studies

1993

A Longitudinal Study of the Experiences of Students with Disabilities: Preliminary Findings for Years One and Two

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1993

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Executive Summary

.This report presents findings from the first and second years of a four-year longitudinal study of real-world experiences of over 600 students with disabilities after they leave the public school system. The study is only one component of several that comprise the Special Education Effectiveness Studies. The central purpose of the longitudinal study is to assess experiences of students with disabilities in each of the following functional life skill areas: employment; independent living; recreational, social and leisure skill acquisition; and post-secondary education. Outcomes in each of these four areas are planned to be monitored through spring 1994.

Findings to date reveal mixed outcomes for students with disabilities; in some instances, the students' type of disability appears to mitigate their outcomes. In the domain of employment, the majority of study participants were reported to be employed less than 40 hours per week; the majority also had jobs that did not provide fringe benefits such as health insurance. A significant portion (almost 40%) were unemployed. Among those employed, income was an issue, with those who worked fewer hours per week tending to earn relatively lower wages. Finally, students with severe or profound levels of retardation were least likely to be employed; those with learning or emotional disabilities were most likely to be employed.

Despite participant expectations to live as independently as possible within the next five years, the vast majority (72%) continued to live at home with their parent(s) in the year following graduation. Transportation, family support, and financial assistance were commonly reported unmet needs in the quest to live independently.

In the domain of recreational, social and leisure skill acquisition, it was found that students in this study were most likely to engage in independent and/or family supported recreational activities after graduation from high school. Participation in clubs and organizations declined over time. Students' frequency of socializing with friends who do not have disabilities also generally declined following graduation.

Three-fourths of the students being followed by this study were not involved in any form of post-secondary education at the end of their first year following high school graduation. Many indicated having no desire for continuing their education; and a substantial number reportedly had discontinued their efforts at obtaining a post-secondary education, with financial reasons being commonly cited.

Preliminary recommendations accompany each set of findings reported. They reflect a philosophy that education must be student-driven, and that cooperative and collaborative efforts across agencies and organizations will be necessary to adequately meet the needs of students with disabilities. Because the study is not yet completed, these preliminary findings and recommendations will need to be revisited as more data become available.

A Longitudinal Study of the Experiences of Special Education Students

Introduction

This report presents findings from the first and second years of a four-year longitudinal study of real-world experiences of students with disabilities after they leave the public school system. The study is only one component of several that comprise the Special Education Effectiveness Studies. When taken collectively, these studies are intended to assess the overall effectiveness of special education in developing students' life skills. This larger body of work is being conducted by the Texas Education Agency with the support of a multi-year grant from the Texas Planning Council for Developmental Disabilities.

The central purpose of the longitudinal study is to assess the real-world experiences of students with disabilities in each of the following functional life skill areas: employment; recreational, social and leisure skill acquisition; independent living; and post-secondary education. In addition, information about the students' backgrounds and their expectations for the future are examined. Specifically, this report addresses the following major questions:

1. What employment experiences do students with disabilities have after leaving the public school system?

2. What outcomes do students with disabilities have in the domain of independent living, after leaving the public school system?

3. What recreational, social and leisure experiences do students with disabilities have after leaving the public school system?

4. What post-secondary education experiences do students with disabilities have after leaving the public school system?

Description of the Special Education Effectiveness Studies

To accomplish the investigation of real-world experiences of students with disabilities, the longitudinal component follows approximately 600 students who had been in special education programs during their final year of public school (1990-91). Data collection for the first year of the study was completed by summer 1991; the study is planned to continue until summer 1994, three years after the students' completion of high school. Whenever possible, the students themselves responded to the approximately 160 questions on the data collection instrument; in some instances, however, students' parents or caretakers responded on the students' behalf.

The longitudinal component complements a cross-sectional component that studied a sample of students in special education who had graduated by summer 1990. Per the mandate in Senate Bill 417, §3.05, the findings from the cross-sectional component were reported in February 1991 to the State Board of Education and the Texas Legislature (*The Effectiveness of Special Education in Developing Life Skills of Students*, TEA Publication No. GE1-543-02). The purpose of the cross-sectional component was to determine the extent to which a sample of former students had integrated into their communities in the one to three years since their departure from the public school system. Thus, the cross-sectional component studied how students fared in the community "after the fact" of graduation; whereas the longitudinal component featured in this report is sensitive to experiences of students with disabilities as they occur in time.

There also are two parallel study components examining the formal transition process for students exiting the public school system. One examines a group of students who exited from the system just prior to implementation of an Individual Transition Plan (ITP) for each student as required under a memorandum of understanding authorized by TEC §21.510, 19 TAC §89.246. The other examines a cohort group of 16-year-old students in special education programs at the time that the ITP requirement took effect. Reports on each of these components are anticipated in the coming year.

Additionally, each of the four areas discussed in this study will be compared in a later study to trends in the general population for persons without disabilities. This study remains to be designed.

Findings pertaining to each of the four major questions addressed by the longitudinal component will be reviewed next in this report. Also, preliminary recommendations for Texas public education programs, linked to both the current findings and to those reported in 1991, will be identified within each of the four major areas. The reader is reminded that such recommendations are necessarily preliminary in nature, as the study is not yet completed. The recommendations may best be thought of as a way to spark dialogue among all relevant parties—schools, agencies, private providers, students, parents, and so on—that focuses upon how to meet the learning needs of students with disabilities both now and as they enter the real world.

Findings and Preliminary Recommendations

What employment experiences do students with disabilities have after leaving the public school system?

In this study, employment and unemployment experiences of participants are examined in terms of several more specific areas: job seeking skills; job quality, wages and benefits; satisfaction with employment; summer employment; vocational education; unemployment; and, expectations for future employment. Preliminary recommendations concerning employment opportunities and outcomes for students with disabilities are presented after the findings, at the end of this section of the report.

Job-seeking skills. The process of locating a job is a major challenge for any student upon graduation from high school, and this is equally true for persons with disabilities. For participants in this study:

- The most commonly reported resource used in locating either first or current employment was themselves (35% and 39%, respectively). Vocational adjustment coordinators were next most commonly utilized in locating first employment (21%).

- Eight percent of the participants reported receiving assistance from an agency in seeking their first jobs; 14% reported receiving agency assistance in seeking their current jobs.

- The type of disabling condition of an individual was associated with variations in the pattern of self-assistance. Half (52%) of all participants with mental retardation reported the school as their major source of assistance in locating first employment, and a similar percentage reported inter-agency support in locating

their current jobs (49%). In contrast, the majority of participants with learning disabilities reported relying most often on themselves or a family member in locating both first employment (69%) and current jobs (84%). A similar pattern existed for participants with emotional disabilities.

- Seventy percent of the participants or their caretakers reported that the students do not have a current résumé for employment purposes. About 10 percent of the students have an up-to-date resúme, while about one-fifth (20%) do not know if they have one.

Job quality, wages and benefits. Several findings emerged from the survey questions pertaining to students' jobs, wages and benefits.

- Students' jobs were classified by title with the United States Department of Labor's Dictionary of Occupational Titles (DOT), in order to gauge their quality. This standard classification system showed that students in the study are most likely to be employed in low paying jobs, typically at the entry level, in areas such as: (a) service occupations (19%); (b) transportation, packaging, and handling (9%); and (c) sales and clerical occupations (7%). Table 1 summarizes information reported on the surveys about the nature of students' current occupations, while Table 2 summarizes the structures of their current employment. By way of explanation, the following definitions should guide interpretation of Table 2: noncompetitive employment refers to those jobs created specifically for individuals with disabilities; employment without support refers to a job where the individual masters job tasks independently and does not need specialized assistance to learn or maintain the work; employment with time-limited support refers to a job where a person requires short-term assistance to learn job tasks, and intermittent assistance to maintain job performance; and employment with long-term support refers to a job in which the individual requires on-going assistance in learning job tasks and maintaining job performance.

- Almost two-thirds (62%) of all employed participants reported working less than 40 hours per week. Of those who worked less than 40 hours, about two-thirds (68%) received wages between $3.00 to $4.99 per hour. Of those participants (38%) who worked more than 40 hours per week, roughly two-thirds (65%) made a wage of $5.00 or more per hour. Table 3 (see next page) portrays information about participants' wages grouped by their type of disability.

Table 1. Participants' Current Occupations

Employment Situation Listed on Survey Form	Percent of Repondents
Work for employer	74%
Other employment situations	9%
Full-time student	8%
Sheltered workshop	6%
Homemaker	2%
Self-employed	<1%
Volunteer work	<1%
Day activity center	<1%

Table 2. Payment Structure of Participants' Type of Employment

Type of Payment Structure Listed on Survey	Percentage of Participants
Full-time competitive employment without support	60%
Part-time competitive employment without support	20%
Noncompetitive employment	10%
Part-time competitive employment with time-limited support	5%
Part-time competitive employment with long-term support	3%
Full time competitive employment with time-limited support	2%

Table 3. Disabling Condition and Rate of Pay per Hour

Disabling Condition	Rate of Pay/Hour: $0.00 to $2.99 N*	%	$3.00 to $4.99 N	%	$5.00 & Up N	%
Physical	0	(0%)	6	(75%)	2	(25%)
Auditory	0	(0%)	0	(0%)	0	(0%)
Visual	1	(25%)	3	(75%)	0	(0%)
Mental	11	(28%)	26	(67%)	2	(5%)
Emotional	0	(0%)	16	(57%)	12	(43%)
Learning	3	(2%)	92	(51%)	86	(47%)
Multiple	2	(50%)	2	(50%)	0	(0%)

**Key: N = number of participants; % = percentage of participants*
***Percentages are computed by row, across the table.*

- Over half (59%) the participants who are working report the lack of fringe benefits.

- Approximately two-thirds (66%) of the participants in this study did not receive any public assistance benefits during their first year after graduation. Of those students who did receive public assistance benefits, more than half (55%) received supplemental security income (SSI).

Satisfaction with employment. Among participants who are working, 87% reportedly are highly satisfied with their current employment situation.

Summer employment. Three statements of findings emerged from the data collected about students' summer employment.

- Almost half (46%) of the students reported being employed on a part-time basis during the summer months while in high school; the remainder were either employed on a full-time basis (24%) or were unemployed (30%).

- An examination of summer employment by type of disability indicated that students with mental retardation are more likely to be unemployed than any other group of students with disabilities. Students with emotional disabilities are most likely to be employed on a part time basis, and students with learning disabilities are most likely to be employed on a full-time basis.

- Within the category of mental retardation, a pattern emerged whereby students' degree or extent of retardation was associated with a varying likelihood of unemployment during the summer. In particular, students with mild retardation were more likely to be employed either part time or full time (52% and 29%, respectively) than those with moderate retardation (41% employed part time), severe retardation (54% were unemployed), or profound retardation (78% unemployed).

Vocational education. Vocational education is the primary educational program for all students with disabilities except those with visual impairment(s). In this study, most students were enrolled in special education vocational programs; however, some were enrolled in regular vocational education (see Figure 1, below).

Figure 1. Disabling Condition and Vocational Education Enrollment

	Special and Vocational Education Enrollment*					
Disabling Condition	VAC	CBI	VEH	BVE	IVE	CVAE
Physical	X					
Auditory	X					
Visual	X					
Mental	X	X	X			
Emotional		X				X
Learning		X				X
Multiple	X	X	X			

VAC = Vocational Adjustment Class;
CBI = Community-based Instruction;
VEH = Vocational Education for the Handicapped;
BVE = Basic Vocational Education;
IVE = Individual Vocational Education;
CVAE = Coordinated Vocational Academic Education.

- Students receiving vocational education were more likely to have a job (52%) than their peers who had not been in vocational education (12%). However, having been in vocational education was not necessarily associated with relatively higher wages ($5.00 plus per hour) in those jobs.

- The amount of pay earned by participants appears to be more strongly associated with students' disabilities rather than with having been in a vocational education program. Employed participants with multiple disabilities or mental retardation most often have the lowest paying jobs, while those with emotional or learning disabilities most often have higher paying jobs (see Table 3 on page 4).

Unemployment. Although reports vary in the survey, it became apparent that unemployment is a significant issue for students with disabilities, and particularly for students with certain kinds of disabilities.

- Overall, almost two-fifths (40%) of the participants were unemployed. Among those reported to be unemployed, as noted before, the greatest number of them have severe and/or profound mental retardation.

- For those participants who want to work but are currently unemployed, 36 percent cite reasons which can be controlled or managed, either by themselves or by an agency or other entity (e.g., student assistance, transportation, job training programs); 33 percent cite reasons that are context-bound (lack of jobs in the community, need to supervise children); and 31 percent cite other factors.

Expectations for future employment. Most participants (82%) reported high expectations for obtaining and keeping a job in the future. These expectations are very optimistic if compared to employment rates for persons with disabilities. Some more specific findings include:

- Over the next five years, three-quarters (75%) of the participants indicated plans for a future employment arrangement that included full-time competitive employment without support services. About one-fourth (25%) of the participants reported minimal expectations for each of the remaining competitive and noncompetitive employment arrangements listed on the data collection instrument.

- When expectations for getting a job were examined by type of disabling condition, departures from the overall pattern of optimism were evident. In particular, less than one-third of the participants with multiple disabilities (27%) express high optimism about obtaining and maintaining a job in the future. Study participants with mental retardation or physical disabilities typically express moderate optimism for future employment (65% and 60%, respectively), whereas those in the study with other types of disabling conditions most often report high expectations for future employment: learning (92%); auditory (86%); emotional (83%); and, visual (80%).

These variations in expectations, by type of disability, may result from students' preliminary experiences and attempts at obtaining employment. For example, recall that relatively greater numbers of students with mental retardation were unemployed at the end of the second data collection period for this study.

Preliminary Recommendations

Preliminary recommendations. Based upon the findings reported above, four preliminary recommendations for Texas public schools are offered. A fifth recommendation is directed at other agencies and providers who work in concert with the schools in supporting the development and independent functioning of students with disabilities.

1. School personnel must maintain or intensify their efforts at teaching job seeking skills to their students, including such routine matters as preparing and maintaining résumés.
2. All students should be afforded access to high quality educational programs that adequately prepare them for jobs in the marketplace of today and tomorrow, regardless of the students' type of disability. Such new occupational areas and future employment opportunities should include adequate fringe benefits.
3. The findings suggest that greater attention must be paid to matching student skills and job requirements in the market place. If educational programs are truly to be "student-driven," then educators must attend more carefully to the learning needs, styles and interests of individual students. Similarly, attention must be paid to the task structures and characteristics that will be presented by the jobs of the future. Ideally, this recommendation and the preceding one will achieve fruition through collaborative efforts on the parts of schools, businesses, agencies and private providers, so that all students—regardless of the type of disability they may have—may become productive, self-actualizing citizens.
4. To not only legitimize but promote the efforts called for in the first two recommendations, schools should be held accountable for how their students with disabilities fare in seeking employment upon exit.
5. Schools do not function in isolation when preparing students with disabilities for adult living. Consequently, the public and private agencies that provide services to them must work cooperatively to educate current and future employers about the quality of job performance the students have to offer, rather than focusing solely on the nature of their disabling condition(s). Furthermore, these agencies should assist in seeking out and/or developing new and worthwhile employment opportunities in community businesses, for students with disabilities.

What outcomes do students with disabilities have in the domain of independent living, after leaving the public school system?

Participants' outcomes in the domain of independent living are discussed in terms of several more specific areas: residential arrangements, support of independent living, mobility and community access, and expectations for independent living in the future. Findings pertaining to each of these will be reviewed in turn, and preliminary recommendations will be presented at the end of this section.

Residential arrangements. Prior to graduation from high school, 92% of the participants were said to be living at home with one or more parent(s). Fewer than two percent of the respondents selected each of the remaining options listed on the survey instrument. Some changes were noticed in the first year following graduation from high school; these are summarized as follows:

- After leaving high school, the most substantial change in residential arrangements for students is a decrease (from 92% to 72%) in the number of individuals continuing to live at home with parents. Overall, participants' current living arrangements were reported as follows (in descending order of frequency): living at home with parent(s) (72%); living independently with spouse or roommate (15%); and, other living arrangements (5%). Fewer than three percent of the respondents selected each of the remaining options on the survey instrument.
- Regardless of the students' type of disability, staying at home with parents was the predominant living arrangement in the year following graduation from high school.

Support for independent living. Participants, or their caretakers, indicated the following support services were most needed for students to live as independently as possible in the community (in descending order of frequency): other support services (29%); transportation (23%); support from family (20%); fiscal assistance (19%); attendant care (6%); and, domestic assistance (3%). Thus, transportation was the most frequently reported *specific* unmet service need.

Mobility/community access. A variety of findings were noted about how former students, who have disabilities, move about and interact with their communities. These include:

- Over one-half (58%) of the participants have a valid driver's license of some kind, ranging from a moped/motorcycle license to a commercial license. In general, participants were most likely to move about their community by driving (52%) or relying on a family member to drive them (24%).
- Among those participants who rely upon public transportation to move about the community, mainline transportation is most commonly employed (63%).

- In terms of community accessibility or consumerism, a large number of participants (80%) made use of a photo identification card for independent living. For example, they often used the card to be able to cash checks for retail purchases.
- The former students' participation in the democratic process is evidently limited; fewer than half (42%) were registered to vote.

Expectations for independent living in the future. Participants report high expectations (72%) for living as independently as possible within the next five years. More specific findings are as follows:

- Respondents expected to have the following residential arrangements five years from now: living independently with a spouse or roommate (38%); living independently in an apartment alone (29%); and, living at home with parents (23%).
- Expectations varied with the disabling condition of the person. Participants with visual, auditory, learning and emotional disabilities most often expressed high expectations for independent living. Participants with physical disabilities were moderately likely to express high expectations. Finally, participants with mental retardation or multiple disabilities (or their caretakers, when they answered the survey) were least likely to express high expectations for living independently.

Table 4. Percentage of Participants with High Expectations for Independent Living by Disabling Condition

Disabling Condition	Percentage of Participants with High Expectations
Visual	93%
Auditory	86%
Learning	85%
Emotional	79%
Physical	55%
Mental	33%
Multiple	18%

- Generally speaking, participants do not appear to be living as independently now as they would like to be in the next few years.

Preliminary recommendations. As before, the recommendations set forth in this section are directed both at schools and at other agencies that have the mission of fostering the growth and well-being of students with disabilities.

1. Schools must be held accountable for ensuring that students acquire the basic skills necessary for living as independently as possible in the community, including such fundamentals as how to apply for financial assistance, how to obtain a driver's license, registering to vote, and so forth.
2. Acquiring the skills necessary for independent living while in school is not sufficient to ensure that independent living will be realized. Preparation for community life requires cooperative and collaborative efforts on behalf of other support agencies and from the community. Inter-agency planning for coordinating post-school support services must begin while participants are still in school. Since inter-agency planning is a timely process, early planning with students, parents and public and private service providers is critical for full integration within the community.

What recreational, social and leisure experiences do students with disabilities have after leaving the public school system?

This study investigated the recreation, social and leisure experiences of participants in terms of each of the following areas: recreation and leisure time; socialization and friendships; predicting happiness with friendships; expectations for the future; and, involvement with the criminal justice system. Findings pertaining to each area will be reviewed, and the section will conclude with some preliminary recommendations.

Recreation and leisure. A number of items on the data collection instrument targeted students' participation in various forms of recreational activities. When examined over time, the following findings emerged.

- While participants were students in high school, their active involvement in all forms of recreational activities was reported as follows: clubs and organizations (29%); independent recreation and leisure activities (26%); family-supported recreation (13%); community-supported recreation (8%); specialized recreation (4%); other types of recreation (3%); and, day programs (1%). Specialized recreational activities are those designed solely for persons with disabilities, for example, a summer camp.
- Also while in high school, many students participated in school-related extracurricular activities (descending order): other school groups (14%); team sports (13%); performing groups (7%); community groups (5%); and/or student government (1%).
- One year after leaving school, most of the participants (81%) were reported to be actively participating in some type of recreational activity in their communities. Of that 81%, many reported involvement in more than one recreational activity (the following percentages may reflect duplication): independent recreation and leisure (66%), family-supported recreation (25%), religious-affiliated recreation (17%), local clubs and organizations (7%), community-supported recreation (5%), other types of recreation (5%) and, specialized recreation (5%).
- The greatest changes to occur during the first year after leaving high school were in the areas of independent recreation/leisure activities (up 37%) and participating in clubs and organizations (down 22%). These may

best be explained by the relatively greater availability of clubs and organizations to students while they are in school. As a result, many more students with disabilities may resort to independent recreation and leisure activities upon leaving high school.

- In most instances, respondents indicated that community recreational facilities were readily accessible to persons with disabilities, both while they were still in school (92%) and during the first year after exiting high school (93%).

Expectations for recreation in the future. The data collection instrument probed both the types of activities participants expected to engage in over the next five years, and their expectations for such involvement.

- Whether the students were currently participating in recreational activities or not, the great majority of respondents stated that they expected to engage in independent recreation and leisure activities in the next five years (76% and 69%, respectively). The next most common response, again regardless of whether or not the students were currently participating in activities, revealed an expectation for family-supported recreation (14% and 19%, respectively). All other response options on the survey instrument were selected by fewer than 10% of the participants.

- Of those participants planning on future recreational involvement, 88% reported high expectations and 12% reported low expectations for such involvement.

Socializing and friendships. As with most young adults, having a social life and making friendships are very important to persons with disabilities. In the year following completion of high school, changes were noted in the participants' number of friendships and their patterns of socializing with others who do not have disabilities. These are described next.

- When in high school, participants reportedly socialized very frequently with persons who do not have disabilities (90% on a daily basis; 8% on a weekly basis). Following departure from high school, the frequency generally seems to have declined greatly (49% on a daily basis; 34% on a weekly basis).

- Whether their friends have disabilities or not, participants reportedly formed over half of all their current friendships while they were still in high school (52% with disabilities and 56% without). Almost all (95%) of the participants indicated that they were happy with their current friendships.

Table 5. Participants' Number of Friends Without Disabilities

Number of Friends Without Disabilities	Year of the Study 1990-1991	1991-1992	Difference
None*	——	52 (10%)**	——
1-5	73 (26%)	173 (39%)***	+13%
6-10	66 (23%)	108 (24%)***	+1%
11-15	23 (8%)	46 (10%)***	+2%
16-20	32 (11%)	26 (6%)***	-5%
More than 20	92 (32%)	96 (21%)***	-11%

**The category "none" was not an option on the 1990-91 survey.*
***Percentage for 1991-92 survey includes the category "none."*
****Adjusted percentages with the category "none" omitted.*

- Participants' number of friendships with students who do not have disabilities changed from the time the students were in their last year of high school, to the end of their first year after leaving high school. At each point in time, students in the study reported how many friends without disabilities they had, using the following response scale: none; one to five friends; six to ten friends; 11 to 15 friends; 16 to 20 friends; and, more than 20 friends. Table 5 shows the changes in how respondents answered the item over time.

As shown in the table, the two categories demonstrating the largest differences over time occurred in the "one to five" and "more than 20" categories. This change in the number of friends probably is very similar to that which occurs when most students leave high school initially, since high school is a place for socializing, as well as obtaining an education.

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Table 6. Feelings About Friendships and Satisfaction with Job

Feelings About Friendships	Level of Satisfaction with Current Job: Very Satisfied N	%	Somewhat Satisfied N	%	Somewhat Dissatisfied N	%	Very Dissatisfied N	%
Very happy	127	(57%)	75	(34%)	12	(5%)	8	(4%)
Somewhat happy	17	(24%)	39	(56%)	12	(17%)	2	(3%)
Somewhat unhappy	2	(22%)	4	(45%)	2	(22%)	1	(11%)
Very unhappy	0	(0%)	1	(33%)	0	(0%)	2	(67%)

Predicting happiness with friendships. Findings from the study indicate that it is statistically possible to predict how a student in the sample will feel about his or her friendships. Two variables that statistically predict happiness with friendships are: (1) the frequency with which the student socializes with friends without disabilities, and (2) the student's level of job satisfaction. Higher levels of job satisfaction (see Table 6) and socializing more often with friends without disabilities (see Table 7) would lead one to expect that a given individual is very happy with his/her friendships. This finding is of importance, since the study also revealed that students' frequency of socializing with others who do not have disabilities declines over the first year following graduation from high school. If educators and others are to work together to promote the overall well-being and development of students with disabilities, then these predictive relationships should be leveraged in directions associated with greater student happiness.

Expectations for friendships in the future. Most participants (89%) reported high expectations for developing new friendships in the next five years, regardless of whether or not the new friendships will be with persons who have or do not have disabilities.

Criminal justice system. It is an unfortunate fact that not all outcomes are positive for students with disabilities. Some students engage in inappropriate or illegal behaviors for any of several reasons (or unknown reasons), with the result that they enter the criminal justice system.

- Most participants reported having no criminal convictions (94%). By the end of 1991, a small percentage of persons with disabilities had been convicted of a misdemeanor infraction (4%) or a felony offense (2%). In 1991, the percentage of felony convictions for the study sample (2%) was slightly higher than the felony

Table 7. Feelings About Friendships and Frequency of Socializing

Feelings About Friendships	Frequency of Socializing with Friends without Disabilities: Daily N	%	Weekly N	%	Monthly N	%	Yearly N	%	Never N	%
Very happy	176	(54%)	97	(30%)	25	(8%)	3	(1%)	22	(7%)
Somewhat happy	46	(36%)	59	(47%)	9	(7%)	0	(0%)	13	(10%)
Somewhat unhappy	8	(42%)	6	(32%)	1	(5%)	0	(0%)	4	(21%)
Very unhappy	0	(0%)	1	(33%)	0	(0%)	1	(33%)	1	(33%)

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convictions statewide (0.5%) in the general population (Criminal Justice Policy Council, 1992).

Preliminary recommendations. Because of the complexities involved in considering residential arrangements, socializing and leisure experiences, the recommendations in this section are necessarily broader than those provided elsewhere in the report. They are predicated upon a belief that a multifaceted and collaborative approach is fundamental to providing students optimal levels and forms of support.

1. The challenge for school personnel is to strike a balance between teaching specific and generalized skills, that is, between developing skills that are specific to the individual student and/or appropriate to all students. Students with disabilities may need specific training in developing specialized recreational skills (for example, adaptive physical education). Concurrently, these same students need to acquire recreational skills along with students who do not have disabilities, particularly in the interest of fostering the socializing that leads to student happiness. The focus must be on developing those skills that lead to participation in recreational activities that are as close as possible to those activities that most people do.
2. Acquiring the necessary skills for participating in recreational activities is an important way for persons with disabilities to integrate into the community. However, even if schools are teaching such skills (indirectly evidenced by the variety of activities in which students in this study participated while in school), transferring such skills to another setting—the community—is not a guaranteed phenomenon. Therefore, as appropriate for individual students, educators must be sure to provide opportunities for the students to go out physically into the community and practice applying the skills necessary for participation in recreational activities.
3. Data from this study indicate that independent recreation was the most prevalent form of recreation, but it ought not to be the sole recreational option for persons with disabilities. The type and severity of the disabling condition and the particular needs and interests of each individual must be taken into consideration when planning recreational activities. Such attention needs to be maintained after students leave the public school system, so that their experiences will be both beneficial and self-reinforcing.
4. Some participants in the study may be in settings where contact with persons without disabilities is less likely than it is for others. This seems particularly true for participants with more severe forms of mental retardation and multiple disabilities, since they were most likely to be unemployed and they reported so few friendships with persons without disabilities. Especially for these students, opportunities for integrating into group activities with students who do not have disabilities may be an important way to develop friendships. However, integration is a process that must be accompanied by the necessary support services if it is to work effectively. Thus, both instructional and on-going support services truly need to be student-driven, so that services will function to promote the broader goals of student self-actualization.
5. Because this study shows a predictive relationship between students' job satisfaction and their happiness with friendships in the year following graduation, educators should work collaboratively with employers to help students secure jobs which they find fulfilling. This recommendation generally underscores all of the recommendations enumerated earlier, in the section of the report pertaining to employment outcomes (see p. 6).
6. Finally, statewide conviction rates for total crimes, excluding misdemeanor traffic tickets, for students with disabilities are higher than the conviction rates found in the general population. This higher rate ***may*** be indicative of inadequacies in individual transition plans, transition programs in general, and/or in support services. Clearly, further examination of transition as an interactive process across agencies and organizations is needed. While the special education effectiveness studies will address this need in the coming year, schools should endeavor to make persons with disabilities aware of the behaviors that lead to involvement with the criminal justice system, if this is not already occurring.

What post-secondary education experiences do students with disabilities have after leaving the public school system?

Participants' plans and expectations for continued education are discussed next. Reasons for leaving post-secondary schools are examined, as well.

Plans for continued education. As high school students, participants reported a variety of plans for their educational future upon leaving the public school system (see Table 8 on next page).

Table 8. High School Students' Plans for Continued Education

Future Educational Plans	Percentage of Students
Post-secondary college education	27%
Plan to work	26%
No plans at this time	17%
Technical education	12%
Military enlistment	5%
Other educational plans	4%
Additional vocational assessment	3%
Adult and continuing education	3%
District vocational instruction	2%
District academic instruction	1%
Proprietary schooling	<1%

- In the first year after leaving high school, approximately three-fourths of the participants indicated that they do not currently attend a post-secondary school. The remainder currently are attending a post-secondary school. Among them, half attend a two-year community college. Fewer than 7% of the respondents selected any of the other types of post-secondary education listed on the survey form. Thus, overall the participants seem to have followed up on the plans reported at the end of the first year of the study.
- Of those participants who are presently receiving a post-secondary education, the majority reported being happy (89%) about their educational situation; a minority reported being unhappy (11%).
- Many students (N = 116) are no longer enrolled in a post-secondary school. A variety of reasons were reported for their departure (see Table 9).

Table 9. Reasons Participants Dropped Out of a Post-Secondary School

Reasons for Leaving	Percentage of Students
Other reasons	43%
Lack of funds	21%
Lack of basic skills	16%
Personal problems	10%
Medical reasons	4%
Adjustment difficulties	3%
Post-secondary school was uninteresting	3%
Failed Texas Academic Skills Program (TASP)	1%

- Many students (N = 349) were never enrolled in a post-secondary school due to a variety of reasons (in descending order of frequency): no desire to attend (48%); "other" reasons (23%); lack of funds (14%); lack of course work (6%). All other reasons were reported at rates less than or equal to three percent.

Expectations for future post-secondary education. Slightly more than half (54%) of all participants indicated that they continue to have high expectations for obtaining post-secondary education or training in the next five years. However, expectations for continued post-secondary education or training vary according to the type of school the respondents are attending (see Table 10, next page).

Preliminary recommendations. Three recommendations flow from the findings concerning post-secondary education.

1. Schools must make concerted efforts to actively involve all students with disabilities in developing their plans for the future. Senate Bill 417, §3.05 added TEC §21.510 on transition planning. As a result of this legislation, 19 TAC §89.246 created a memorandum of understanding on transition planning. The memorandum on transition planning requires all public school districts in Texas to develop an individual transition plan (ITP) for students who are 16 years of age or older and are receiving special education services. In their last year of high school, some participants indicated that they had no plans whatsoever for the future. While this may be true, it seems more likely that some students had transition plans but were excluded from (or unaware of) their development. Excluding a student from actively participating in the development of his or her ITP may create an impression that it is only some sort of documentation for school records, rather than an active student plan for the future.

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Table 10. Expectations of Students Attending a Post-Secondary School

School/College	Number of Respondents	Expectations of Respondents: High	Low
Community college	58	95%	5%
University	17	100%	0%
Business school	3	100%	0%
Vocational school	8	88%	12%
Military education	3	100%	0%
Other	26	77%	23%
High school (GED)	1	0%	100%

2. There is a clear need to develop stronger linkages between public secondary and post-secondary schools. Students should be given a variety of choices in selecting a post-secondary school and an educational program that meets their individual needs, taking into account their various interests and preferences. Public schools need to strengthen linkages with post-secondary schools offering a continuation of high school programs. Furthermore, these programs must be reflective of the job needs of the community.

3. Flexible post-secondary programs need to be developed that will enable goals and objectives to be achieved within reasonable time frames by all students, including those who have disabilities. Modifications in programs need to be considered for students with disabilities, since some students may need extra time to complete the requirements of a course; emphasis should be upon content mastery, rather than units of time.

Implications and Preliminary Conclusions

To recap, the four domains of outcomes for students with disabilities being explored in the longitudinal component of the special education effectiveness studies are: employment; independent living; social, recreational and leisure skills acquisition; and, post-secondary education. Findings from the first two years of a planned four-year study reveal a number of issues in the education of students with disabilities that warrant further attention, even though they—and the accompanying recommendations—are by definition preliminary in nature.

Employment Experiences

Schools must do a thorough job in preparing students to locate jobs in the community. Since students and parents typically locate jobs on their own, schools should attempt to develop closer working relationships with parents of students with disabilities. Likewise, schools need to develop closer working relationships with businesses as well as public and private providers, to increase the likelihood that persons with disabilities will be able to locate jobs both now and in the future. Whenever possible, these jobs should include adequate pay, fringe benefits, and opportunities for advancement.

Similarly, programs in vocational education must prepare students with disabilities for jobs that will exist in the community when they leave high school. Establishing closer working relationships with community business people will help to accomplish this. In so doing, school personnel will be informed of those job skills that students will need to know in order to be competitive in the job market. Conversely, business persons must become aware of the young people leaving high school and their program areas of study. In this way community business persons will be informed about the job pool of the future.

Independent Living Experiences

The primary living arrangement for students with disabilities is staying at home with parent(s), even though there was a substantial decrease in the frequency of this arrangement by the second year of the study. Available data do not offer a clear indication of what other option(s) will become more frequent as time passes, although study participants had high expectations for living as independently as possible within the next five years. Consequently, this situation will need to be continually reassessed before a final conclusion is drawn.

Participants indicated that transportation, support from their families and fiscal assistance were the forms of support most needed to promote their independent living. Because mobility is a vital means to accessing community life, schools should work cooperatively with other agencies in discovering ways to alleviate potential transportation barriers before students leave the system, including such basic steps as ensuring that students are able to use mainline transportation and/or to obtain a valid driver's license.

In order to facilitate students' functioning as independently as possible in the community, schools must provide students with the skills necessary to access support services (e.g., financial assistance, applying for entitlements, and so forth) after graduation. Acquiring these skills involves inter-agency planning and community input(s).

Upon graduation from high school, persons with disabilities must continue to receive the supports needed for independent living in a continuous flow of services from all providers. This continuous flow of services must replace the current "stop and start" delivery system where students graduate to "waiting lists" for services, or must go through eligibility screening procedures which may or may not find students with more severe disabilities eligible to receive support services.

Recreation, Social and Leisure Experiences

Participants' involvement in recreational and leisure activities shifted from the first to the second year of this study. Movement from membership in clubs and organizations to independent recreational and leisure activities indicates that participants were beginning to rely more on themselves for filling leisure time. Conversely, there may be more opportunities for students to participate in organized activities while in high school, relative to life after graduation. It is most likely that a combination of variables contributed to the tremendous increase in independent activities after leaving high school, such as an increase in self-reliance and a decrease in opportunities for recreational participation for students with disabilities.

More friendships with persons who do not have disabilities were developed while participants were in high school, than were developed after graduation. School is a place where persons of a similar age gather for formal educational instruction; it is also a place where young people acquire social skills. After leaving high school the opportunities for socializing with similar-aged peers likely decreases. The challenge for educators and others who work with students who have disabilities is to guard against their becoming increasingly isolated as they gain increased independence.

The frequency of participants' involvement in the criminal justice system is not necessarily surprising, given the complexities surrounding their disabilities and possible shortcomings in the systems designed to support their transition and integration into the community at large. Students with disabilities may fall prey to criminal misconduct in their efforts to integrate into community life, particularly if there is a deficient infrastructure supporting this process.

Post-Secondary Education

Schools must actively seek post-secondary schools with programs for students with disabilities. These programs should, whenever possible, continue the academic course work that was started in the secondary school. They should be based on the needs, interests, preferences and abilities of students with disabilities rather than availability. In addition, these programs should give students the opportunity to complete requirements for a particular educational program without imposing unnecessarily restrictive time frames, such as those set by the traditional school calendar.

Overall, it seems that in the year following graduation from high school, students with disabilities have mixed outcomes in the four domains examined by this study. In some instances, outcomes appear to be linked to students' type of disability despite the reality of wide variations in individual levels of functioning; yet all students need closely monitored, high quality individual educational programs and transition plans that will lead to optimal outcomes. The reader is reminded, in closing, that the findings, recommendations and conclusions provided in this report are necessarily preliminary in nature and that they must continue to be examined and discussed as part of the on-going effort to achieve a "world-class" educational system for all public school students in Texas.

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